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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,067	11/19/2003	Chhman Sukhna	P/1281-121	7234

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NEW YORK, NY 100368403

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,067

Applicant(s)

SUKHNA, CHHMAN

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21,24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/28/06 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-21 and 24-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 has been amended to recite writing instrument comprising "ink-storage portion adapted to store a water-based opaque ink coloring composition said storage portion containing a fibrous filler material, in contact with a writing tip of said writing instrument, which is adapted to provide absorption and release of the water-based opaque ink coloring composition onto a

writing surface by capillary action". It is the examiner's position that this phrase fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of the "ink-storage portion" in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163.

As support for the amendment to claim 1, applicants point to page 1, lines 15-21 of the present specification. However, while page 1, lines 15-21 of the present specification discloses that the present invention includes marker which has filler that provides absorption and release by capillary action and that is in contact with the writing tip, there is no disclosure in the specification as originally filed of the phrase "ink-storage portion". Further, it is not clear if the "ink-storage portion" is equivalent to the filler or what, if any, difference there is between "ink-storage portion" and filler.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-21 and 24-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 1 has been amended to recite that the writing instrument comprises "ink-storage portion adapted to store a water-based opaque coloring ink" and "which is adapted to provide absorption and release of the water-based opaque coloring ink". The scope of the claim

is confusing because it is not clear what is meant by “adapted” or how the ink storage portion is “adapted” to store the ink or to provide absorption and release of the ink.

It is suggested that in claim 1 the phrases “ink-storage portion adapted to store a water-based opaque coloring ink” and “which is adapted to provide absorption and release of the water-based opaque coloring ink” are rewritten as “ink-storage portion that stores a water-based opaque coloring ink” and “which provides absorption and release of the water-based opaque coloring ink”, respectively.

(b) Claim 25, which depends on claim 1, recites that the ink is “free and not in a filler material” while claim 1 has been amended to recite that the ink is stored in storage portion that contains fibrous filler material. Thus, the scope of claim 25 is confusing because it is not clear how the ink is free and not in a filler material as required in claim 25 and is stored in ink-storage portion of writing instrument that contains fibrous filler material as required in claim 1.

In light of the amendment to claim 1, should claim 25 be cancelled?

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 1-6, 8-9, 11-12, 17, 21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loftin (U.S. 5,338,793) in view of JP 630243179 and Mead et al. (U.S. 5,596,027).

Loftin discloses writing instrument comprising capillary feed writing tip at one end of the body, reservoir, i.e. ink-storage portion, made of polyester fiber that is included within the body and connected to the writing tip, and within the reservoir an aqueous ink comprising water, dimethicone copolyol, silica dispersant, and pigment wherein the ink possesses viscosity of 2-10 cP. It is noted that the dimethicone copolyol utilized is known under the tradename Dow 193 or Dow 190 which is identical to the dimethicone copolyol utilized in the present invention. There is no disclosure that the ink comprises titanium dioxide or neutral buoyancy additive (col.1, lines 59-65, col.2, lines 22-25 and 46-49, col.3, lines 7-12, col.4, lines 3 and 13-20, and col.5, lines 14-27). Given that Loftin discloses that the silica is used to prevent the pigment from bonding together, it is clear that the silica functions as a dispersant.

The difference between Loftin and the present claimed invention is the requirement in the claims of polymeric particles having outer polymeric shell which defines inner hollow region.

Pending translation, it is noted that JP 63-243179, which is drawn to ink, discloses the use of 5-40% polymeric particle that is hollow particle acrylate/styrene copolymer containing water. The hollow particles are known under the tradename OP-62 which is well known, as disclosed by Mead et al. (col.10, lines 3-6), as hollow microsphere. It is further disclosed that the hollow particle is blended with dye. The motivation for using such hollow particle is to produce ink with high hiding power and high storage stability (abstract).

Although there is no disclosure in Loftin or JP 63-243179 of the density of the ink, given that Loftin in combination with JP 63-243179 discloses water-based ink comprising identical type and amount of polymeric particles as presently claimed, it is clear that the ink would intrinsically possess density as presently claimed. Further, given that Loftin in combination with JP 63-243179 discloses dimethicone copolyol and polymeric particles as presently claimed, it is clear that the dimethicone copolyol and polymeric particles would intrinsically cohesively bond to one another to provide homogenous non-settling ink as presently claimed.

In light of the motivation for using polymeric particles disclosed by JP 63-243179 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such polymeric particles in the ink of Loftin in order to produce ink that has high hiding power and high storage stability, and thereby arrive at the claimed invention.

8. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loftin in view of JP 63-243179 as applied to claims 1-6, 8-9, 11-12, 17, 21, and 24 above, and further in view of Allison et al. (U.S. 6,344,498).

The difference between Loftin in view of JP 63-243179 and the present claimed invention is the requirement in the claims of deionized water.

Allison et al., which is drawn to ink, disclose the use of deionized water in order to prevent decrease in stability, loss of good pigment dispersion, and uneven color distribution which results from ions present in tap water (col.3, lines 54-61).

In light of the motivation for using deionized water disclosed by Allison et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use deionized water as the water in Loftin in order to produce ink with good stability, pigment dispersion, and even color distribution, and thereby arrive at the claimed invention.

9. Claims 13-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loftin in view of JP 63-243179 as applied to claims 1-6, 8-9, 11-12, 17, 21, and 24 above, and further in view of Imagawa et al. (U.S. 5,716,217).

The difference between Loftin in view of JP 63-243179 and the present claimed invention is the requirement in the claims of glycol humectant, fluorinated surfactant, alcohol, and pH adjustor.

Imagawa et al., which is drawn to erasable ink comprising hollow particles as is Loftin, disclose the use of glycol in order to assist separation of writing from writing surface, anionic or nonionic surfactant including fluorinated surfactant to enhance erasability of the ink, alcohol to ensure that the ink readily dries, and pH adjustor (col.5, line 51-col.6, line 3 and col.6, lines 24-30 and 33) which one of ordinary skill in the art would recognize is used to control the pH of the

ink. Given that Imagawa et al. disclose glycol as presently claimed, it is clear that the glycol would intrinsically function as humectant.

In light of the motivation for using glycol, fluorinated surfactant, alcohol, and pH adjustor disclosed by Imagawa et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use glycol, fluorinated surfactant, alcohol, and pH adjustor in the ink of Loftin in order to produce ink that is easily erasable, dries readily, and possesses desired pH, and thereby arrive at the claimed invention.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loftin in view of JP 63-243179 as applied to claims 1-6, 8-9, 11-12, 17, 21, and 24 above, and further in view of Li (U.S. 2003/0171453).

The difference between Loftin in view of JP 63-243179 and the present claimed invention is the requirement in the claim of release agent.

Li, which is drawn to erasable ink, disclose the use of release agent in order to enhance the ability of the ink to be cleanly erased (paragraphs 20-22).

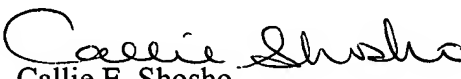
In light of the motivation for using release agent disclosed by Li as described above, it therefore would have been obvious to one of ordinary skill in the art to use release agent in the ink of Loftin in order to enhance the ability of the ink to be cleanly erased, and thereby arrive at the claimed invention.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
10/13/06